PTI/PTIO Application A0056213
BASF Corporation
0247040195
September 23, 2016

Division of Air Pollution Control

Application for Permit-to-Install or Permit-to-Install and Operate

This section should be filled out for each permit to install (PTI) or Permit to Install and Operate (PTIO) application. A PTI is required for all air contaminant sources (emissions units) installed or modified after January 1, 1974 that are subject to OAC Chapter 3745-77. A PTIO is required for all air contaminant sources (emissions units) that are not subject to OAC Chapter 3745-77 (Title V). See the application instructions for additional information.

For OEPA use only:				
	☐	Installation	☐	Request Federally enforceable restrictions
	☒	Modification	☐	General Permit
	☐	Renewal	☐	Other

1. Please summarize the reason for this permit application. This text will be in the public notice that will appear in the newspaper of the county where the facility is located.

   BASF requests to increase the allowable throughput for the rotary calciners (P009, P010, P102, and P103) and process NOx-generating products in the copper calciners (P006 and P095). This application is also being submitted to revise calculation methodologies for P026 and P131.

   See the attached document for a detailed description of the requested modification.

   Is the purpose of this application to transition from OAC Chapter 3745-77 (Title V) to OAC Chapter 3745-31 (PTIO)?

   No

2. **Establish PER Due Date** - Select an annual Permit Evaluation Report (PER) due date for this facility (does not apply to facilities subject to Title V, OAC Chapter 3745-77). If the PER has previously been established and a change is now desired, a PER Change Request form must be filed instead of selecting a date here.

   PER not applicable (Title V) or due date already established

3. **Federal Rules Applicability**

New Source Performance Standards (NSPS) *New Source Performance Standards are listed under 40 CFR 60 - Standards of Performance for New Stationary Sources.*	Not affected
National Emission Standards for Hazardous Air Pollutants (NESHAP) *National Emissions Standards for Hazardous Air Pollutants are listed under 40 CFR 61. (These include asbestos, benzene, beryllium, mercury, and vinyl chloride).*	Not affected
Maximum Achievable Control Technology (MACT) *The Maximum Achievable Control Technology standards are listed under 40 CFR 63 and OAC rule 3745-31-28.*	Not affected
Prevention of Significant Deterioration (PSD) *These rules are found under OAC rule 3745-31-10 through OAC rule 3745-31-20.*	Not affected
Greenhouse Gas Pollutant Prevention of Significant Deterioration (PSD) *These rules are listed under 40 CFR Parts 51, 52.*	Not affected
Non-Attainment New Source Review *These rules are found under OAC rule 3745-31-21 through OAC rule 3745-31-27.*	Not affected
112 (r) - Risk Management Plan *These rules are found under 40 CFR 68.*	Not affected
Title IV (Acid Rain Requirements) *These rules are found under 40 CFR 72 and 40 CFR 73.*	Not affected

4. **Express PTI/PTIO** - Do you qualify for express PTI or PTIO processing?

   No

5. **Air Contaminant Sources in this Application** - Identify the air contaminant source(s) for which you are applying below. Attach additional pages if necessary. Section II of this application and an EAC form should be completed for each air contaminant source.

Emissions Unit ID	**Company Equipment ID** (company's name for air contaminant source)	**Equipment Description** (List all equipment that are a part of this air contaminant source)
P006	COPPER CALCINER 1 (E-10)	Copper Calciner 1 - Feed End/Main Draft, Copper Calciner 1 - Packaging Dust Collector
P009	ROTARY CALCINER #4 (E-13-1)	TRI-MER scrubber for NOx., CTO/SCR Dust collector and HEPA Filter, RC #4 Dust Collector 4b, RC #4 Dust Collector 4a
P010	ROTARY CALCINER #1 (E-14)	F-1 Scrubber for Rotary Calciners 1,2,3 (E-14), TRI-MER scrubber for NOx., F-1 Scrubber for Rotary Calciners 1,2,3 (E-14), F-1 Scrubber for Rotary Calciners 1,2,3 (E-14)
P026	GEN CAT BLENDER (E-30)	Dust Collector #8 (58807528), P024-3 - Tank Area F-2 Scrubber, TRI-MER scrubber for NOx.
P095	Copper Calciner #2 (E-101)	Copper Calciner #2, Copper Calciner #2, Copper Calciner #2
P102	ROTARY CALCINER #2	CTO/SCR Dust collector and HEPA Filter, F-1 Scrubber for Rotary Calciners 1,2,3 (E-14), TRI-MER scrubber for NOx., Dust Collector No. 2 (for P102 - Rotary Calciner 2 and P121 - P&S Dryer 2), Dust Collector No. 2 (for P102 - Rotary Calciner 2 and P121 - P&S Dryer 2)
P103	ROTARY CALCINER #3	CTO/SCR Dust collector and HEPA Filter, TRI-MER scrubber for NOx., F-1 Scrubber for Rotary Calciners 1,2,3 (E-14), Dust Collector No. 3 (for P103 - Rotary Calciner 3 and P122 - P&S Dryer 3), Dust Collector No. 3 (for P103 - Rotary Calciner 3 and P122 - P&S Dryer 3)
P131	Copper Tablet Precursor Process	Copper Tablet Precursor Process - Bin Vent, Copper Tablet Precursor Process - Bin Vent, Copper Tablet Precursor Process - Dust Collector, Copper Tablet Precursor Process - Dust Collector

The Emissions Unit ID would have been created when a previous air permit was issued. If no previous permits have been issued for this air contaminant source, leave this field blank. If this air contaminant source was previously identified in STARShip applications as a "Z" source (e.g., Z001), please provide that identification and a new ID will be assigned when the PTI/PTIO is issued.

6. **Trade Secret Information** - Is any information included in this application being claimed as a trade secret per Ohio Revised Code (ORC) 3704.08?

   No

7. **Permit Application Contact** - Person to contact for questions about this application:

Timothy Anglin		EHS Specialist
Name		Title
120 PINE STREET	Elyria, OH	44035

Street Address	City/Township, State	Zip Code
4403296644		tim.anglin@basf.com
Phone	Fax	E-mail

8. **Application Attachments**

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
556498	Emission Calculations	Calculations		X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P006
Company Equipment ID: COPPER CALCINER 1 (E-10)

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Revised PTI P00119072 issued 8/24/2015; Initial Title V Permit issued 7/27/2001

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.
   - If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
   - Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
   - Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
   - If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
   - Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	0	0	0	0	0
PM # 10 microns in diameter (PE/PM10)	0	0	0	0	0
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	0	0	0
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0.89	0.89	3.9	0.89	3.9
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0
Highest single HAP	0	0	0	0	0

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   Emissions are controlled by the following:

   Calcining emissions: Main Draft baghouse
   Product drumming emissions: Baghouse 58007100

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile
6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
553598	P006 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile
8. **Request for Federally Enforceable Limits -** As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No
9. **Continuous Emissions Monitoring -** Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile
10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.
    Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555876	P006 - Process EAC	EAC	3100 Process operation	X			

555877	P006 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P009
Company Equipment ID: ROTARY CALCINER #4 (E-13-1)

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Initial PTO P0016170 issued 12/28/1993; Initial Title V Permit issued 7/27/2001

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.
   - If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
   - Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
   - Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
   - If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
   - Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	34.11	1.70	7.5	3.07	13.5
PM # 10 microns in diameter (PE/PM10)	8.61	0.43	1.9	3.07	13.5
PM # 2.5 microns in diameter (PE/PM2.5)	8.61	0.43	1.9	3.07	13.5
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	8.53	0.43	1.9	0.43	1.9
Highest single HAP	8.53	0.42	1.9	0.42	1.9

Hazardous Air Pollutants (HAPs):

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Chromium	8.53	0.42	1.9	0.42	1.9

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   Emissions are controlled by the following:

   Calcining emissions: TriMer Scrubber (non-NOx products) or SCR baghouse/SCR (for NOx products)
   Feed emissions: Baghouse 4A (P009-1)
   Discharge emissions: Baghouse 4B (P009-3)

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile

6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555990	P009 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile

8. **Request for Federally Enforceable Limits -** As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No

9. **Continuous Emissions Monitoring -** Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile

10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form

corresponds to this air contaminant source.

Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555980	P009 - Process EAC	EAC	3100 Process operation	X			
555881	P009 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P010
Company Equipment ID: ROTARY CALCINER #1 (E-14)

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Initial Registration P0016171 issued 8/19/1977; Initial Title V Permit issued 7/27/2001

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.
   - If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
   - Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
   - Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
   - If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
   - Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	34.19	1.71	7.5	3.07	13.5
PM # 10 microns in diameter (PE/PM10)	8.65	0.43	1.9	3.07	13.5
PM # 2.5 microns in diameter (PE/PM2.5)	8.65	0.43	1.9	3.07	13.5
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	17.79	0.90	3.9	0.90	3.9
Highest single HAP	17.78	0.89	3.9	0.89	3.9

Hazardous Air Pollutants (HAPs):

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Chromium	17.78	0.89	3.9	0.89	3.9

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   Emissions are controlled by the following:

   Calcining emissions: F-1 Scrubber (non-NOx products), TriMer Scrubber and baghouse (NOx products)
   Feed emissions: F-1 Scrubber
   Discharge emissions: F-1 Scrubber

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile

6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555989	P010 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile

8. **Request for Federally Enforceable Limits -** As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No

9. **Continuous Emissions Monitoring -** Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile

10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form

corresponds to this air contaminant source.

Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555981	P010 - Process EAC	EAC	3100 Process operation	X			
555883	P010 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P026
Company Equipment ID: GEN CAT BLENDER (E-30)

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
PTI P0116506 issued 4/7/2014; Initial Title V Permit issued 7/27/2001

Requesting an allowable NOx emission rate based on a TriMer scrubber control efficiency of 90%.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	0	0	0	0	0
PM # 10 microns in diameter (PE/PM10)	0	0	0	0	0
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	0	0	0
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	19.0	1.90	8.3	1.90	8.3
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic	0	0	0	0	0

compounds (VOC)					
Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0
Highest single HAP	0	0	0	0	0

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   The requested allowable (lb/hr) is an average over the batch duration, not a maximum hourly value.

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?

   See Facility Profile

6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.

   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
556433	P026 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.

   See Facility Profile

8. **Request for Federally Enforceable Limits** - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?

   No

9. **Continuous Emissions Monitoring** - Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.

   See Facility Profile

10. **EAC Forms** - The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.

    Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
556428	P026 - Process EAC	EAC	3100 Process operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P095
Company Equipment ID: Copper Calciner #2 (E-101)

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Revised PTI P00119072 issued 8/24/2015; Initial Title V Permit issued 7/27/2001

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.
   - If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
   - Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
   - Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
   - If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
   - Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	0	0	0	0	0
PM # 10 microns in diameter (PE/PM10)	0	0	0	0	0
PM # 2.5 microns in diameter (PE/PM2.5)	0	0	0	0	0
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0.89	0.89	3.9	0.89	3.9
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	0	0	0	0	0
Highest single HAP	0	0	0	0	0

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   Emissions are controlled by the following:

   Calcining emissions: Main Draft DC (P095-B)
   Feed hopper emissions: Feed hopper DC baghouse (P095-A)
   Discharge emissions: Discharge Baghouse 58007200 (P095-C)

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile

6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555140	P095 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile

8. **Request for Federally Enforceable Limits** - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No

9. **Continuous Emissions Monitoring** - Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile

10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form corresponds to this air contaminant source.
    Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555878	P095 - Process	EAC	3100 Process	X			

	EAC		operation				
555879	P095 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P102
Company Equipment ID: ROTARY CALCINER #2

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Initial Title V Permit issued 7/27/2001

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	34.19	1.69	7.4	3.07	13.5
PM # 10 microns in diameter (PE/PM10)	8.65	0.42	1.9	3.07	13.5
PM # 2.5 microns in diameter (PE/PM2.5)	8.65	0.42	1.9	3.07	13.5
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	17.79	0.89	3.9	0.89	3.9
Highest single HAP	17.78	0.88	3.9	0.88	3.9

Hazardous Air Pollutants (HAPs):

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Chromium	17.78	0.88	3.9	0.88	3.9

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   Emissions are controlled by the following:

   Calcining emissions: F-1 Scrubber (non-NOx products), TriMer Scrubber or SCR unit and baghouse (for NOx products)
   Feed emissions: Baghouse
   Discharge emissions: Baghouse

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile

6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555988	P102 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile

8. **Request for Federally Enforceable Limits -** As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No

9. **Continuous Emissions Monitoring -** Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile

10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form

corresponds to this air contaminant source.

Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555982	P102 - Process EAC	EAC	3100 Process operation	X			
555899	P102 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P103
Company Equipment ID: ROTARY CALCINER #3

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Initial Title V Permit issued 7/27/2001

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.

- If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
- Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
- Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
- If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
- Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	34.27	1.69	7.4	3.07	13.5
PM # 10 microns in diameter (PE/PM10)	8.68	0.42	1.9	3.07	13.5
PM # 2.5 microns in diameter (PE/PM2.5)	8.68	0.42	1.9	3.07	13.5
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	17.83	0.89	3.9	0.89	3.9
Highest single HAP	17.82	0.88	3.9	0.88	3.9

Hazardous Air Pollutants (HAPs):

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Chromium	17.82	0.88	3.9	0.88	3.9

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

   Emissions are controlled by the following:

   Calcining emissions: F-1 Scrubber (non-NOx products), TriMer Scrubber or SCR unit and baghouse (for NOx products)
   Feed emissions: Baghouse
   Discharge emissions: Baghouse

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile

6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555987	P103 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile

8. **Request for Federally Enforceable Limits -** As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No

9. **Continuous Emissions Monitoring -** Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile

10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form

corresponds to this air contaminant source.

Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
555986	P103 - Process EAC	EAC	3100 Process operation	X			
555908	P103 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			

Section II - Specific Air Contaminant Source Information

Facility ID: 0247040195
Emissions Unit ID: P131
Company Equipment ID: Copper Tablet Precursor Process

One copy of this section should be filled out for each air contaminant source (emissions unit) covered by this PTI/PTIO application identified in Section I, Question 5. See the application instructions for additional information.

1. **Air Contaminant Source Installation or Modification Schedule** - Check all that apply (must be completed regardless of date of installation or modification):

Modification to an existing air contaminant source/facility (for which modification has not yet begun) - List previous PTI or PTIO number(s) for air contaminant sources included in this application, if applicable, and describe the requested modification (attach an additional sheet, if necessary):
Initial PTI P0115631 issued 6/23/2015

See attached document for description of requested modification.
When will you begin to modify the air contaminant source? after modification permit has been issued

2. **SCC Codes** - List all Source Classification Code(s) (SCC) that describe the process(es) performed by this air contaminant source (e.g., 1-02-002-04).

See Facility Profile

3. **Emissions Information** - The following table requests information needed to determine the applicable requirements and the compliance status of this air contaminant source with those requirements. Suggestions for how to estimate emissions may be found in the instructions to the Emissions Activity Category (EAC) forms required with this application. If you need further assistance, contact your District Office/Local Air Agency representative.
   - If total potential emissions of HAPs or any Toxic Air Contaminant (as identified in OAC rule 3745-114-01) are greater than 1 ton/yr, fill in the table for that (those) pollutant(s). For all other pollutants, if "Emissions before controls (max), lb/hr" multiplied by 24 hours/day is greater than 10 lbs/day, fill in the table for that pollutant.
   - Actual emissions are calculated including add-on control equipment. If you have no add-on control equipment, "Emissions before controls" will be the same as "Actual emissions".
   - Actual emissions and Requested Allowable should be based on operating 8760 hr/yr unless you are requesting federally enforceable operating restrictions to limit emissions. If so, calculate emissions based on requested operating restrictions and describe in your calculations.
   - If you use units other than lbs/hr or ton/yr, specify the units used (e.g., gr/dscf, lb/ton charged, lb/MMBtu, tons/12-months).
   - Requested Allowable (ton/yr) is often equivalent to Potential to Emit (PTE) as defined in OAC rule 3745-31-01 and OAC rule 3745-77-01.

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Particulate emissions (PE/PM) (formerly particulate matter, PM)	2.61	0.27	1.2	1.51	6.6
PM # 10 microns in diameter (PE/PM10)	2.60	0.27	1.2	1.51	6.6
PM # 2.5 microns in diameter (PE/PM2.5)	2.60	0.26	1.2	1.51	6.6
Sulfur dioxide (SO2)	0	0	0	0	0
Nitrogen oxides (NOx)	0	0	0	0	0
Carbon monoxide (CO)	0	0	0	0	0
Organic compounds (OC)	0	0	0	0	0
Volatile organic compounds (VOC)	0	0	0	0	0

Lead (Pb)	0	0	0	0	0
Total Hazardous Air Pollutants (HAPs)	1.57	0.17	0.7	0.17	0.7
Highest single HAP	1.57	0.17	0.7	0.17	0.7

Hazardous Air Pollutants (HAPs):

Pollutant	Emissions before controls (max)* (lb/hr)	Actual emissions (lb/hr)	Actual emissions (ton/year)	Requested Allowable (lb/hr)	Requested Allowable (ton/year)
Chromium	1.57	0.17	0.7	0.17	0.7

4. **Best Available Technology (BAT) -** For each pollutant for which the Requested Allowable in the above table exceeds 10 tons per year, BAT, as defined in OAC 3745-31-01, is required. Describe what has been selected as BAT and the basis for the selection:

```
Emissions are controlled by the following:

Raw powder feed system emissions: Receiver
Mixer vent emissions: Bin vent
Dryer vent emissions: Bin vent
Solids conveyor emissions: Dust collector
Mill/blend system emissions: Dust collector
```

5. **Control Equipment -** Does this air contaminant source employ emissions control equipment?
   See Facility Profile
6. **Process Flow Diagram -** Attach a Process Flow Diagram to this application for this air contaminant source. See the application instructions for additional information.
   Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
556031	P131 PFD	Process flow diagram		X			

7. **Modeling information: (Note: items in bold in Tables 7-A and/or 7-B, as applicable, are required even if the tables do not otherwise need to be completed. If applicable, all information is required** An air quality modeling analysis is required for PTIs and PTIOs for new installations or modifications, as defined in OAC rule 3745-31-01, where either the increase of toxic air contaminants from any air contaminant source or the increase of any other pollutant for all air contaminant sources combined exceed a threshold listed below. This analysis is to assure that the impact from the requested project will not exceed Ohio's Acceptable Incremental Impacts for criteria pollutants and/or Maximum Allowable Ground Level Concentrations (MAGLC) for toxic air contaminants. (See Ohio EPA, DAPC's Engineering Guide #69 for more information.) Permit requests that would have unacceptable impacts cannot be approved as proposed. See the line-by-line PTI/PTIO instructions for additional information.
   See Facility Profile
8. **Request for Federally Enforceable Limits** - As part of this permit application, do you wish to propose voluntary restrictions to limit emissions in order to avoid specific requirements listed below, (i.e., are you requesting federally enforceable limits to obtain synthetic minor status)?
   No
9. **Continuous Emissions Monitoring -** Does this air contaminant source utilize any continuous emissions monitoring (CEM) equipment for indicating or demonstrating compliance? This does not include continuous parametric monitoring systems.
   See Facility Profile
10. **EAC Forms -** The appropriate Emissions Activity Category (EAC) form(s) must be completed and attached for each air contaminant source. At least one complete EAC form must be submitted for each air contaminant source for the application to be considered complete. Refer to the list attached to the application instructions. Please indicate which EAC form

corresponds to this air contaminant source.

Process Flow Diagrams:

Attachment ID	Attachment Type	Description	EAC Form Type	Public Document	Trade Secret Document	Trade Secret Justification	Event Date
556032	P131 - Process EAC	EAC	3100 Process operation	X			
556033	P131 - Fuel Burning EAC	EAC	3101 Fuel burning operation	X			